



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,635	04/01/2004	Peter Losbrock	32368-202378	7567
26694	7590	04/11/2006	EXAMINER	
VENABLE LLP P.O. BOX 34385 WASHINGTON, DC 20045-9998			RODRIGUEZ, JOSEPH C	
			ART UNIT	PAPER NUMBER
			3653	
DATE MAILED: 04/11/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/814,635	LOSBROCK ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Joseph C. Rodriguez	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 3-18, 20-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-18, 20 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/21/06</u> . | 6) <input type="checkbox"/> Other: ____.  |

***Final Rejection***

Applicant's arguments filed 1/27/06 have been fully considered but they are not persuasive for reasons detailed below.

The 35 U.S.C. 112 rejections are maintained or modified as follows:

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites the limitation "the measured results". There is insufficient antecedent basis for this limitation in the claim.

Claim 17 recites the limitation "the measurement results". There is insufficient antecedent basis for this limitation in the claim.

The prior art rejections are maintained or modified as follows:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 3-18, 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hosel (US 6,477,741).

Regarding claims 20-21, 4-11, Hosel (Fig. 1-8 teaching multiple embodiments) teaches a spinning preparation machine in which waste can be separated from fiber material, having

- a collecting device (suction channels and conduits);

- a sensor arrangement comprising a light source (42; col. 4, ln. 43 et seq. teaching multiple types of colored light) adapted to project light onto the waste (Id.), and a photoelectric sensor (41; Fig. 1b, 2, 4, 6, 7 teaching various placements near suction removal hoods 17-21, conduits 22-26, central conduit 27 and col. 5, ln. 43-45 teaching that a separate sensor may be used in each fiber separation location) adapted to detect light reflected from the waste and convert reflected light into electrical signals (see e.g., fig. 4, 6, 7; col. 4, ln. 43-col. 5, ln. 48 teaching that "light sources 42c and 42d associated with the cameras 41a, 41b are used for picture-taking in reflected light" wherein CCD operates by converting light into electrical signals), and

- a measurement element (evaluating unit 47) adapted to measure the electrical signals (col. 4, ln. 43-col. 5, ln. 48).

Regarding claim 3, Hosel teaches that the sensor means can be a CCD camera (col. 4, ln. 63). Thus, as CCDs function by converting light to electric current, it is implicit that the sensor can detect differences in brightness.

Regarding claims 12, Hosel teaches using an electronic evaluation device

Art Unit: 3653

to determine material specific statistics (col. 4, ln.19-col. 6, ln. 27), thus it is implicit that Hosel determines one or more parameters selected from: the variation of the brightness of the good fibres; the coefficient of variation of the brightness of the good fibres; and the standard deviation of the brightness of the good fibres.

Regarding claims 13, Hosel teaches using pre-specified quantities and, in the event of a departure therefrom, effecting a modification of the waste separation (col. 5, ln. 10-57 teaching control device that modifies based on inputted or "pre-given data").

Regarding claims 14-15, 17, Hosel teaches a separating guide vane being adjustable in dependence on measurement results from the evaluation device, wherein the measurement results can be regarded as usable in a control and regulation circuit for optimizing the cleaning of the fiber material as Hosel teaches adjusting quality settings based on sensor readings (col. 4, ln. 19 et seq.).

Regarding claim 16, Hosel teaches at least two adjusting mechanisms (Fig. 5; 45a, 45b) for setting the angles of the respective guide vanes that are connected to a control and regulation device (col. 4, ln. 60-68), thus it is implicit that these mechanisms use some form of angle-measuring device in order to set the vanes properly.

Regarding claim 18, it is implicit that the sensor arrangement can be used for determining a blockage of fiber material in the collecting device as the sensor arrangement determines the brightness levels and these levels can be used to determine blockage.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-18, 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosel (US 6,477,741) in view of Farah et al. ("Farah")(EP 0 226 430 A2).

Hosel as set forth above teaches all that is claimed. However, under an alternative interpretation, the features of the evaluation device determining parameters such as variation of the brightness levels of reflected light or a control device that compares the results with pre-specified quantities may not be regarded as implicit. Farah, however, expressly teaches measuring the brightness level of waste particles and comparing the measured results with previously extracted calibration data (col. 5, ln. 10 et seq.; Fig. 3-5 showing range of brightness levels). Moreover, Hosel teaches that sensing and evaluating the waste in this manner allows one to better control the product quality (col. 5, ln. 35 seq.). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Hosel as taught above to better control product quality.

***Response to Arguments***

Applicant's arguments that the prior art fails to teach the claimed features are unpersuasive. Here, Applicant's principal argument is that a CCD camera cannot be regarded as a photoelectric sensor and that Hosel does not teach using said sensor to detect reflected light. Hosel, however, as cited above expressly teaches using the camera to detect reflected light (col. 4, ln. 43-col. 5, ln. 48 teaching that "light sources 42c and 42d associated with the cameras 41a, 41b are used for picture-taking in reflected light") and the secondary reference also teaches this feature. Further, CCD cameras are frequently regarded as photoelectric sensors as these cameras operate by sensing or capturing the reflected light, or image created thereby, and converting said light information into electrical signals. It is thus unclear how this device cannot be regarded as a photoelectric sensor. Here, it is also noted that Hosel teaches that the CCD camera is merely an exemplary electro-optical device. Thus, as Hosel's device operates by capturing light information from the waste using a visual sensor and feeding this information to an electronic evaluation unit, it is clear that some form of photoelectric sensor is being used. Consequently, as the prior art undermines Applicant's arguments, the claims stand rejected.

Examiner has maintained the prior art rejections, statutory rejections and drawing objections as previously stated and as modified above. Applicant's amendment necessitated any new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the

Art Unit: 3653

extension of time policy as set forth in 37 CFR 1.136(a). The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

### ***Conclusion***

Any references not explicitly discussed above but made of record are considered relevant to the prosecution of the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Joseph C Rodriguez** whose telephone number is **571-272-6942** (M-F, 9 am – 6 pm, EST).

The **Official** fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

The examiner's **UNOFFICIAL Personal** fax number is **571-273-6942**.

Further, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.



Status information for published applications may be obtained from either Private PMR or Public PAIR. Status information for unpublished applications is available through Private PMR only.

For more information about the PAIR system, see

<http://pair-direct.uspto.gov>

Should you have questions on access to the Private PMR system, contact the Electronic Business Center (EBC) at **866-217-9197** (Toll Free).

Alternatively, inquiries of a general nature or relating to the status of this application or proceeding can also be directed to the **Receptionist** whose telephone number is **571-272-6584** or to the Supervisory Examiner, Kathy Matecki, **571-272-6951**.

Signed by Examiner Joseph Rodriguez

jcr

\*\*\*

April 7, 2006

A handwritten signature in black ink, appearing to be 'JR' followed by a long, sweeping horizontal stroke.